



**Ameren Illinois
Advanced Metering Infrastructure (AMI)
Annual Update
April 2015**

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Introduction

In accordance with the requirements of Public Acts 97-616 and 97-646, Ameren Illinois Company (Ameren Illinois) has prepared this Advanced Metering Infrastructure (AMI) annual report to outline expenditures and accomplishments achieved through December 2014. Specifically, Section 16-108.6(e) of the Public Utilities Act (Act) requires:

(e) On April 1 of each year beginning in 2013 and after consultation with the Smart Grid Advisory Council, each participating utility shall submit a report regarding the progress it has made toward completing implementation of its AMI Plan. This report shall:

- (1) Describe the AMI investments made during the prior 12 months and the AMI investments planned to be made in the following 12 months;
- (2) Provide sufficient detail to determine the utility's progress in meeting the metrics and milestones identified by the utility in its AMI Plan; and
- (3) Identify any updates to the AMI Plan.

The report also provides a summary of the forecasted expenditures and goals for 2015 (January-December), an update on Consumer Education and Communications, AMI metric requirements, and AMI tracking mechanisms.

Consultation with the Smart Grid Advisory Council (SGAC)

As required by Section 16-108.6(e), Ameren Illinois consulted with the SGAC regarding this AMI annual report. Ameren Illinois representatives met with the SGAC on March 11 and made a presentation on the annual report. Ameren Illinois also provided a draft of the annual report to the SGAC prior to the meeting.

2014 AMI Program Accomplishments

- Completed Stage 0 Asset Management
- Completed Stage 1 AMI Residential Billing
- Achieved 2014 AMI Meter/Module/Network Deployment targets
- Received ICC approval of Non-Standard Metering Rider
- Established the Integrated Operations Center
- Created AMI Analytics for Deployment
- Implemented Web Portal (Residential Customers) with Green Button Functionality
- Performed Cybersecurity System Vulnerability Testing and Mitigation Efforts
- Distributed Customer, Employee and Stakeholder AMI Communications


2015 AMI Program Goals

- Implement Remote Connect/Disconnect Functionality
- Deploy Revenue Protection Analytics
- Provide Non Billing Interval Data to Retail Electric Suppliers
- Develop Peak Time Rewards (PTR) Program

- Integrate AMI with Outage Processes
- Implement Cybersecurity Plans and Testing
- Process and Bill Commercial and Industrial Customers
- Deploy Residential Alert Functionality Through the Web Portal
- Enhance and Distribute, Customer, Employee and Stakeholder AMI Communications
- Positioning for the Future: Dynamic Pricing & Interfacing with Consumer Devices

AMI Program Implementation Strategy

The four stages below summarize Ameren Illinois' high-level plan for implementing information technology software applications, equipment and business processes, to provide accurate and timely billing, remote connect/disconnect functionality and customer access to usage information. As outlined in subsequent sections of this document, Ameren Illinois' 2014 program achievements and 2015 program goals will support functionality through the end of Stage 3 of the implementation plan.

Stage 0	Stage 1	Stage 2	Stage 3
Install foundational Meter Data Management System (MDMS) and AMI system	Process and Bill Residential and Commercial/Industrial customers [†]	Upgrade processes and system to support remote connect/disconnect	Peak Time Rewards Program
Prepare systems and processes for installation of 2-way communication network	Integrate AMI/MDMS and prepare for billing Transfer AMI interval data to Retail Energy Suppliers	Revenue Protection Analytics	Event processing such as outage notification and restoration
Manage Asset Information	Customer Web Portal 	Provide Non Billing Interval Data to RES*	
Q2 2014 - Complete ✓	Q4 2014 – Complete ✓	2 nd Quarter 2015	4 th Quarter 2015

[†] Commercial/Industrial functionality will be implemented once Ameren receives C&I Meters from L+G
^{*}Pursuant to Requirements identified in the RES Workshops and CPWG

2014 Program Accomplishments

Completed Stage 0 Asset Management

Ameren Illinois completed Stage 0 in June 2014. Stage 0 included the initial deployment of AMI meters and modules in Hillsboro, data synchronization, and event processing from the customer service system to the Meter Data Management System. Data synchronization to the data warehouse from the AMI solution enables deployment reporting and will allow future analytics functionality.

Completed Stage 1 AMI Residential Billing

Ameren Illinois completed Stage 1 in December 2014. Stage 1 encompassed interfacing data from the Meter Data Management System and the AMI Head End system to the existing Customer Service System (CSS) to facilitate the billing of customers based on the over-the-air meter data reads provided by the advanced meters. Stage 1 functionality included validation, editing, and estimation of AMI meter reads in the Meter Data Management System. AMI interval billed customers' data was integrated into the Ameren Illinois Retail Electric Supplier (RES) portal and through Electronic Data Interchange (EDI) to the Retail Electric Suppliers for monthly billing, similar to existing processes for AMR and legacy metered customers.

The functionality to bill Commercial and Industrial polyphase AMI electric customers was developed. Testing of the billing of polyphase AMI customers was delayed due to the hardware development of the polyphase meter. Testing began in December 2014 and will be implemented in the second quarter of 2015.

System integration between the Meter Data Management System and Ameren Illinois' data warehouse platform was completed. The data warehouse supports the implementation of the residential web portal and the development of deployment analytics. The data warehouse will also be the system that enables the revenue protection data analytics.

Achieved 2014 AMI Meter/Module/Network Deployment targets

Ameren Illinois began meter and module deployments in June 2014 within the Hillsboro operating center. Consistent with its approved AMI Plan, Ameren Illinois exceeded the 2014 targets for electric meters, gas modules, and network equipment as seen in the table below:

AMI Device	2014 Goal	2014 Actual Installed
AMI Electric Meters	40,419	46,972
AMI Gas Modules	25,280	25,797
AMI Network Devices	1,880	1,930

Received ICC Approval of Non-Standard Metering Rider

The Non-Standard Metering Rider for residential AMI and AMR customers became effective September 15, 2014. Ameren Illinois has executed the training, documentation, and communications required to educate our internal and external stakeholders on the procedures to include Non-Standard Metering in field operations and customer communications.

Please see Appendix 4 for the full Non-Standard Metering Biannual Report.

The following chart identifies the number of customers by meter type:

Meter Type	Number of Customers
AMR (Previous Medical Exemptions) *	6
New Non-Standard Metering Rider	
AMR	3
AMI	24

*Medically exempt customers prior to new rider will not receive NSM charges

The following chart outlines NSM fees by service type:

Service Type	NSM Fee
Electric	\$20 monthly
Gas	\$20 monthly
Gas and Electric	\$24 monthly

One-time customer charge of \$70 per device for exchanges if an AMI or AMR meter is already installed.

Established the Integrated Operations Center (IOC)

In October 2014, the first phase of the IOC was successfully implemented to support AMI and business operations. This phase entails integrating IT and operations through the following services:

Asset and Configuration Management: The IOC is managing asset information for the AMI devices, firmware configuration, and management of the configuration data.

Network Monitoring and Management: The IOC monitors alarms, flags, and events for AMI field devices and coordinates their incident diagnosis and resolution. The IOC monitors the AMI Network, infrastructure, and applications.

Billing Support: The IOC collaborates with the Ameren Illinois Customer Accounts Department to communicate potential billing impacts to customers. The IOC monitors and manages daily AMI reads to ensure the delivery of files to the Meter Data Management System.

Firmware Upgrade: The IOC is responsible for executing firmware upgrades to AMI devices.

Operations Support: The IOC will communicate AMI device outages to the Ameren Illinois EOC (Emergency Operations Center) to support outage restoration efforts.

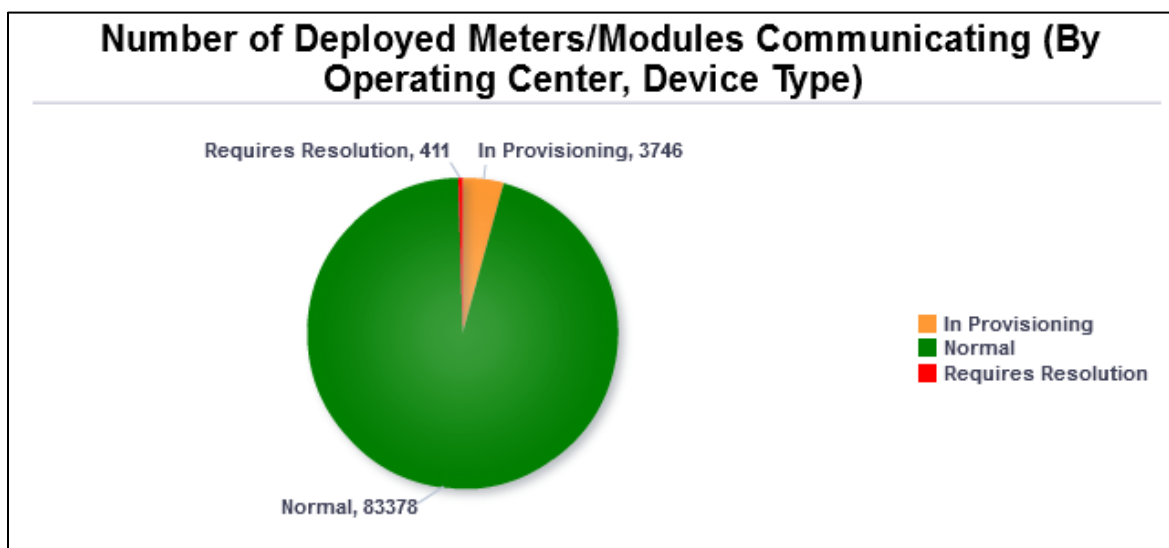
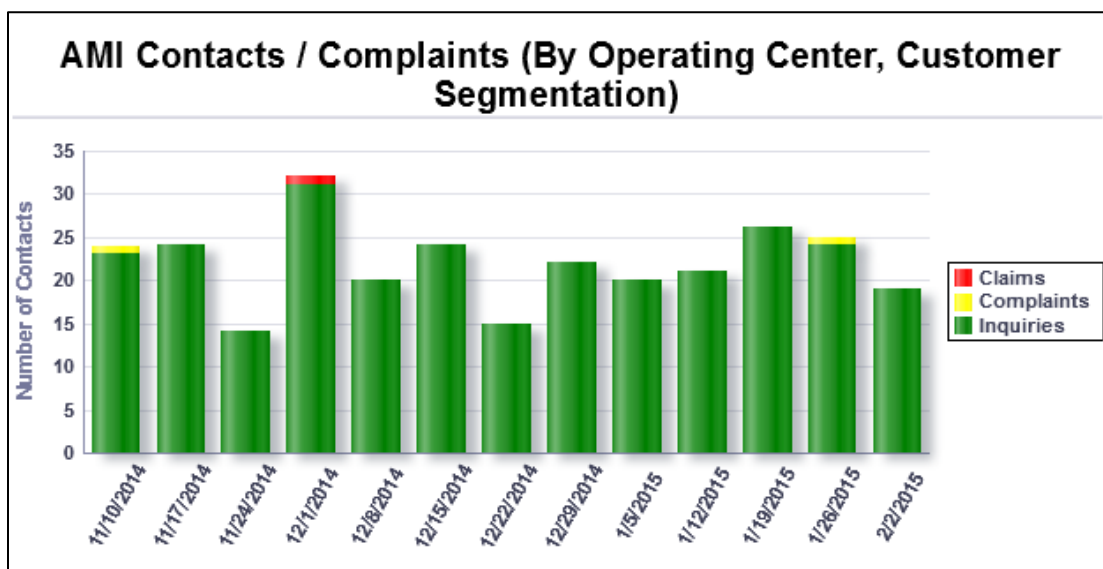
AMI Deployment Support: The IOC is providing support to the AMI deployment by monitoring and reporting on AMI device installation.

Future IOC services will include enhanced predictive analytics reporting to further increase the intelligence and efficiency of AMI operations.

Created AMI Analytics for Deployment

The AMI solution was synchronized with our analytics platform to support AMI deployment. These reports and internal metrics will be further utilized in support of operations and the additional AMI tracking mechanisms ordered by the Commission or agreed to with Illinois stakeholders.

Examples of analytics being used:

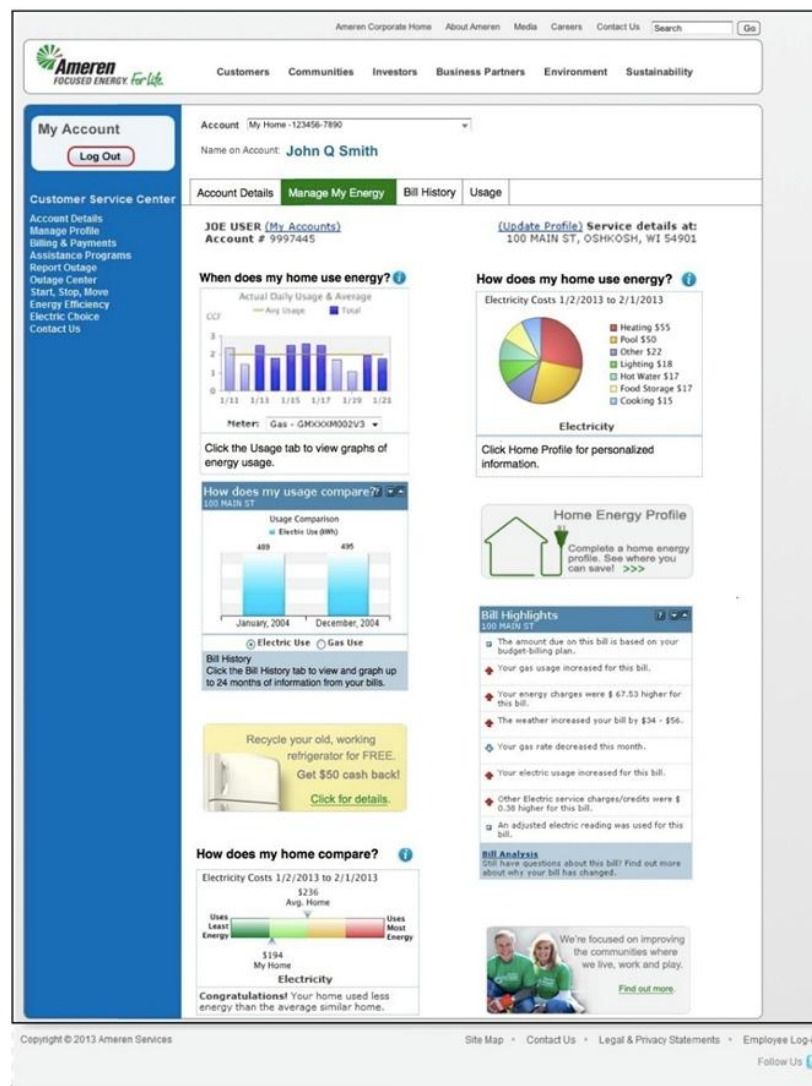


Implemented Web Portal (Residential Customers) with Green Button Functionality

Ameren Illinois contracted with Aclara, an industry leading software-as-a-service web portal provider to integrate a web portal interface for residential customers to view usage data and bill history. Customers are able to utilize Green Button functionality and receive energy efficiency tips to achieve energy savings. AMI customers receive hourly interval data from the previous day, AMR customers receive daily interval data from the previous day, and legacy customers receive monthly usage data after monthly billing.

Three new areas of enhanced web functionality were delivered:

- **Manage My Energy:** Customers are able to view the main features of their most recent bill at a glance. Customers have access to a daily energy usage chart, bill highlights, and bill comparison to the previous month. Additionally, customers can view a breakdown of their energy usage by category and an energy efficiency comparison of their usage versus their neighborhood.
- **Bill History:** This tab displays up to two years of billing history. Customers are able to access their monthly bills by categories such as electric energy charges, taxes and more. Customers can easily view charges and usage data displayed as graphs and charts.
- **Usage:** The usage screen displays hourly energy usage data for AMI-metered customers and daily energy usage data for AMR-metered customers. Customers can access up to two years of energy usage data for both electric and gas service, including usage from the previous day.



Example of Ameren Illinois My Account Residential Web Portal

Performed Cybersecurity System Vulnerability Testing and Mitigation Efforts

Performed Penetration Testing on Field Area Network (FAN) Devices

Ameren Cybersecurity partnered with Accuvant to perform a penetration test on the AMI Field Area Network (meters, collectors, routers). At the conclusion of their testing, Accuvant reported that the AMI Field Area Network (FAN) was unable to be leveraged or penetrated despite technical advantages (provided encryption keys and passwords to the providers on site). Penetration teams were completely unsuccessful in subverting the security with unfettered access to the systems.

Updated the Cybersecurity Plan

In conjunction with AMI's systems integration vendor (IBM), the cybersecurity team initiated a component review design (individual system settings) for AMI servers and applications as a cybersecurity plan update. The update review added component pieces (servers, applications, ports, and protocols) to an existing set of components that are in place to ensure that allocated resources are both known and listed. All reviews and updates were completed and approved by the AMI leadership team.

Conducted Readiness Assessment and Vulnerability Review

Ameren Cybersecurity conducted a series of regularly scheduled vulnerability assessment reviews. During the course of the year there was a significant improvement in the overall system security. After completing the full year of testing and validation, the AMI server environment had no level 5 or level 4 (Critical or Severe) vulnerabilities. A limited number of Moderate vulnerabilities were detected and corrected in encryption strength and protocol. In December 2014, the cybersecurity team worked with the AMI Technical Team to develop a process to eliminate potential encryption key outages.

Conducted Ameren Risk Assessment

During September 2014, Ameren Cybersecurity completed a separate risk assessment of the environment. The goal was to review existing controls and measures in application controls, field area network (FAN) and the 'head end' integration components of the environment. Risk evaluation criteria were all rated "moderate-low" in each area because of the existing integrated patching and system readiness measures being utilized to remove vulnerabilities and track systems down to the individual host level.

Distributed Customer, Employee, and Stakeholder AMI Communications

External Communications

Customer Communications/Education

Ameren Illinois website enhancements have been made and will be updated as meter functionality and systems improvements are introduced over time. A direct link on the Ameren Illinois navigational bar under Infrastructure Improvements has a wealth of information for customers to peruse. Customers can now click the link, **Metering: The Next Generation** to further educate themselves on the advanced metering infrastructure improvements being made by Ameren Illinois. These pages provide links to other information such as FAQ's, an installation video, and secondary research to educate customers further on advanced metering. There is also a section for downloading brochures and other communication regarding the technology and Ameren Illinois' plan to improve energy delivery service.

In 2014, Ameren Illinois used the 2013 Customer Segmentation data to help develop key messages for customer education. As revealed in the study, two-thirds of our customers indicated that having more information about their energy usage and costs would empower them to make changes or reduce their energy consumption. To further define our approach, we used the tested messages from this survey to the drive initial and on-going communications to date.

Key messages from the segmentation research identified four key areas which resonated across all customer segments: Information, Control, Conservation, and Waste Avoidance. We have developed an effective

message that seems to be resonating with customers: Advanced meters provide customers with more information to better control energy usage and costs. Ameren Illinois began using customer segmentation messaging in our customer communication items for the AMI deployment. These items include a 60-day initial letter, 30-day reminder post card and a door hanger to prepare customers for meter and module deployment.

The following chart shows the verbiage per segment:

Customer Segment	Message
True Believer	Over time, the upgrades we're making now will result in more programs, pricing options and energy efficiency tools to help you better understand your energy use and lower your costs.
Concerned Parent	Over time, the upgrades we're making now will result in more programs, pricing options and energy efficiency tools so you can better control your costs and have more to spend on your family.
Cautious Conservative	Over time, the upgrades we're making now will result in more programs, pricing options and energy efficiency tools you can use to stop wasting energy and better control your costs.
Working Class Realist	Over time, the upgrades we're making now will result in more programs, pricing options and energy efficiency tools you can use to better understand how you're spending money on energy-and how you could spend less.

The four customer segments identified in the customer segmentation study are: True Believers, Concerned Parents, Cautious Conservatives, and Working Class Realists. Following is a representative percentage of the Ameren Illinois customers by segment with their key areas of interests regarding Advanced Metering:

- True Believers (12%) – Information/Control/Conservation
- Concerned Parents (33%) – Information/Control/Avoid Waist
- Cautious Conservatives (25%) – Avoid Waste
- Working Class Realists (26%) – Information/Control
- 4% of residential customers could not be defined to a segment




CAUTIOUS CONSERVATIVES
are focused on financial security and control while not compromising on comfort and convenience.

- More likely to be male than female; older and more established
- Engaged in how their household money is spent
- Significantly more likely to be homeowners
- More affluent and educated (bachelor's degree or higher)
- Interested in becoming more energy efficient to save money
- Interested in bigger energy efficiency programs (e.g., water heater, new HVAC, etc.)



CONCERNED PARENTS
are focused on reducing waste and protecting the quality of life for future generations.

- Significantly more likely to be female than male
- Concerned about wasting money and energy
- More likely to be homeowners
- Little discretionary income and significantly more likely to have a high school diploma or less
- Interested in saving money and reducing energy usage waste
- Interested in energy efficiency programs aimed at reducing energy usage waste



WORKING CLASS REALISTS
work hard for a living and are focused on saving money when possible.

- More likely to be female than male; younger and more likely to be just starting out
- Worried about making ends meet, concerned about monthly expenses
- Twice as likely to be renters
- Little discretionary income and tend to be less educated (high school diploma or less)
- Interested in saving money on energy to reduce overall expenses
- Interested in less expensive and portable energy efficiency programs (e.g., CFL light bulbs)



TRUE BELIEVERS
are motivated by energy efficiency programs to protect the environment and conserve natural resources.

- Equally likely to be male or female; tend to be older and more established
- Concerned about protecting the environment
- More likely to be homeowners
- More affluent and highly educated, more likely to have a post-graduate degree
- Interested in protecting the environment and conserving natural resources
- Highly interested in energy efficiency programs to reduce their carbon footprint (e.g., ENERGY STAR Home, fridge recycling, HVAC, water heater, etc.)

Customer Segmentation Information

Media Partnerships to Support Customer Education

As part of the customer communications process, the AMI Communications Team sends a news release to the local daily and community news media prior to the start of meter deployment in each Ameren Illinois service locale. This has led to interviews with local radio stations and newspapers to further help educate customers served by Ameren Illinois on the overall infrastructure improvements, meter upgrades and the future benefits that will allow customers to better manage their energy usage. Some news outlets have published the news of this technology on their social media platforms such as Facebook and Twitter. The AMI Communications Team continues to monitor social media in order to address customer inquiries or misinformation.



Example of Social Media Education and Outreach

Stakeholder/Community Outreach

ISEIF Collaborative Efforts

The Ameren Illinois Communications Team has been working in collaboration with the Illinois Science and Energy Innovation Foundation (ISEIF) since its inception in 2012. As grantees come aboard to support smart grid technologies and advanced metering outreach and education, the Ameren Illinois Communications Team works with them to assist in setting the proper customer and outreach expectations for what the advanced meter can do upon installation and over time.

- In February 2014, Ameren Illinois participated in a webinar in conjunction with ComEd to share in a series of educational webinars for the grantees receiving ISEIF grants.
- In April 2014, Ameren Illinois hosted a tour of the Ameren Illinois Technical Applications Center in Champaign, Illinois. The three key grantees supporting the Ameren Illinois meter upgrade process in attendance were Illinois Green Economy Network (IGEN), Citizens Utility Board (CUB), and Elevate Energy. This tour provided greater insight into the overall infrastructure improvements that Ameren Illinois is doing to make the grid smarter and more reliable as well as the benefits customers will come to enjoy as the functionality of the meters are rolled out over time. Interviews were conducted with various members of these organizations and their support of the technology is on the Ameren Illinois website at AmerenIllinois.com/focus under a section entitled, "What Others Are Saying" as part of our Metering: 'The Next Generation' section. To further support their efforts, Ameren Illinois provided an actual meter to assist in the education and outreach to a network of community colleges.

- In June 2014, the AMI Communications team participated in a webinar hosted for the newest ISEIF Small Grants program. The grantees are: Archeworks, Delta Institute, the Galvin Center for Electricity Innovation, Illinois Institute of Technology, Kindling Group, and Shedd Aquarium.

Other Events/Activities

- In March 2014, the Ameren Illinois Community Relations Team in conjunction with the AMI Communications Team began one-on-one meetings with municipal leaders of communities served by the Hillsboro Operating Center in an effort to help educate and build awareness to the advanced metering project.
- In May 2014, the AMI Communications and Community Outreach Teams participated in the Heartland Conservancy Breakfast to help provide general awareness regarding meter upgrades coming to the communities served by our Hillsboro Operating Center.
- In June 2014, Ameren Illinois AMI Communications Team and Government Relations Team participated in joint CUB and Elevate Energy hosted community outreach events in Litchfield and Hillsboro. Both organizations were gearing up to help share the benefits of smart grid technologies and advanced metering. This event was designed to provide customers with information on these groups and the AMI meter deployment.
- In June 2014, the AMI Communications Team supported the Illinois Municipal League's Annual Board Meeting, held in Loves Park, IL. The AMI Communications Team educated and shared AMI metering technology and information.
- In August 2014, the AMI Communications Team and the local AMI designated community outreach team participated in the largest community event within the Hillsboro community - The Old Settler's Big Parade.
- In October 2014, the AMI Communications Team supported the Montgomery Summit, held in Litchfield to help further educate and build awareness to the overall infrastructure improvements inclusive of advanced metering to local community stakeholders and business leaders.
- In October 2014, outreach began in the communities served by the Ameren Illinois North Pana Operating Center.

Internal Communications

Employee Internal Communications

In addition to educating our customers, we must keep co-workers informed, prepared, and engaged in the AMI Project. Through various communications channels, the AMI Communications Team has an ongoing role in getting the right information to the right co-workers at the right time. We do believe in a "push/pull" strategy for communicating with co-workers. There are times that we "push" information out, however, it is equally important for co-workers to have a place where they can "pull" the information when it's needed.

In summer of 2014, the AMI Communications Team launched the AMI Communications SharePoint site that serves as a repository of information on advanced metering. The site houses internal and external communications, presentations, videos, photos, and co-worker FAQs.

Additionally, the AMI Communications Team performed the following tasks in accordance with the overall AMI communications strategy.

- Co-worker FAQs - A document that outlines questions and associated answers stakeholders might ask once they become aware of the AMI program. This document is modified over time as new features, programs and options are introduced.

- Supported the Change Management/Organization Impact Team by continuing to provide information to enhance co-worker education. The AMI Communications Team developed an AMI Leadership Video that further explains the benefits of advanced metering for customers, co-workers, and Ameren Illinois.
- Continued to support the AMI customer inquiry escalation process addressing concerns and questions about the AMI technology.
- Distributed personalized co-worker newsletters to inform co-workers of updates and milestones regarding AMI deployment in their work location.
- Utilized a “Leadership Letter” to share AMI updates, key topics, opportunities, and challenges.
- Supported the Organizational Impact Team with communication tools and collateral for the Change Champion Network which meets on a monthly basis to communicate changes to existing Ameren Illinois processes as result of AMI. The Change Champions act as subject matter experts in their organizations to help prepare and educate their colleagues on the new and modified AMI processes.

Meter Deployment and Installation Support

The AMI Communications Team supported deployment and training by developing meter installation communication scenarios to help enhance the customer experience and minimize the escalation of issues related to meter deployment.

The AMI Communications Team encouraged each installer to carry an advanced metering brochure with them at each install. This provided an on-the-spot way to educate customers as to the reason why someone other than Ameren Illinois was on their property while allowing the installer to continue with the meter exchange. The brochure, *Improving Your Energy Service* provides customers with a quick overview of all of the infrastructure improvements, inclusive of advanced metering.

Critical Communications Strategic Approach

In 2014, the AMI Communications Team developed a Critical Communications Strategy to help installers maneuver and be prepared to encounter complex situations that might involve pleasant and unpleasant customers, intruding neighbors, community agitators, or media. The purpose of this approach is to mitigate critical scenarios related to AMI before, during, and after deployment, categorizing them into level of priority and engagement.

Emerging and critical issues are assigned a level of engagement based on this criteria and the chart below helps guide our efforts:

- Size: number of units/customers affected
- Frequency/duration: frequency of occurrence, duration of time
- Scope of situation: location and geographic reach
- Area of impact: system, customer, general public
- Type: delay, damage, reliability, accuracy, security
- Nature of discovery: internal, external complaint/inquiry

Class	Definition	Responsible Internal Parties	Possible Communications Actions
Level 1: High	Major exposure/impact. Requires significant operations, integrated communications response, change in systems and procedures.	Ameren Illinois, AMI Leadership Team, AMI Communications Team, AMI Deployment Team, Community and Public Relations, Government Affairs, Regulatory, Customer Service	Direct customer communications, proactive media, broad stakeholder outreach
Level 2: Mid	Serious exposure/impact. Requires immediate actions to contain or isolate the situation. Includes localized situations with wider consequences.	AMI Leadership Team, AMI Communications Team, AMI Deployment Team, Community and Public Relations, Government Affairs, Regulatory, Customer Service	Localized direct customer communications, proactive localized media and outreach
Level 3: Low	Isolated incident/anomaly with limited exposure/impact. Managed locally the situation will be contained.	AMI Leadership Team, AMI Communications Team, AMI Deployment Team	Respond to media inquiries, 1-on-1 customer and stakeholder outreach
Level 4: Emerging	Key data points, other information suggests an issue could arise.	AMI Communications Team	Development of standby messaging, strategies for potential response if the situation elevates

In 2014, this plan was used in installer training and continues to guide our efforts concerning potential issues or situations regarding advanced metering.

There were three key scenarios addressed:

1. Customer/Non Customer and Pleasant/Unpleasant Customer;
2. Reporter or Suspicious/Unusual Behavior; and
3. Hostile/Threat and Installation/Meter Incident.

Positioning for the Future: Dynamic Pricing & Interfacing with Consumer Devices

In 2014, Ameren Illinois participated in numerous ICC led workshops with various stakeholders related to the customer data content, access, and security appropriate to support potential Retail Electric Suppliers (RES) dynamic pricing and other service offerings. From these workshops, Ameren Illinois continued to design its AMI infrastructure and systems to enable existing and potential future dynamic and time variant pricing programs, including the design of support systems to supply non-billing customer specific hourly residential interval AMI data to RES.

Also in 2014, Ameren Illinois worked with the AMI vendor Landis+Gyr in developing a consumer device verification procedure to confirm the ability of consumer devices to be securely registered and communicate through the ZigBee Smart Energy Profile 1.1 to the AMI meter. Ameren Illinois' Technology Applications Center (TAC) will coordinate and perform the testing/verification of consumer devices.

2014 Electric Capital Expenditures

2014 Capital Expenditures	Capital
AMI Meters	\$9.1M
AMI Communications Network	\$5.8M
Hardware	\$0.2M
Software	\$1.1M
Systems Integration	\$18.4M
*Program Management	\$(2.3M)
*Integrated Operations Center	\$(0.2M)
Deployment	\$0.8M
TOTAL	\$32.9M

*Costs have been reallocated to the AMI software, hardware, and device assets per guidance from Ameren Plant Accounting

2015 Program Goals

Achieve 2015 AMI Device Deployment Goals

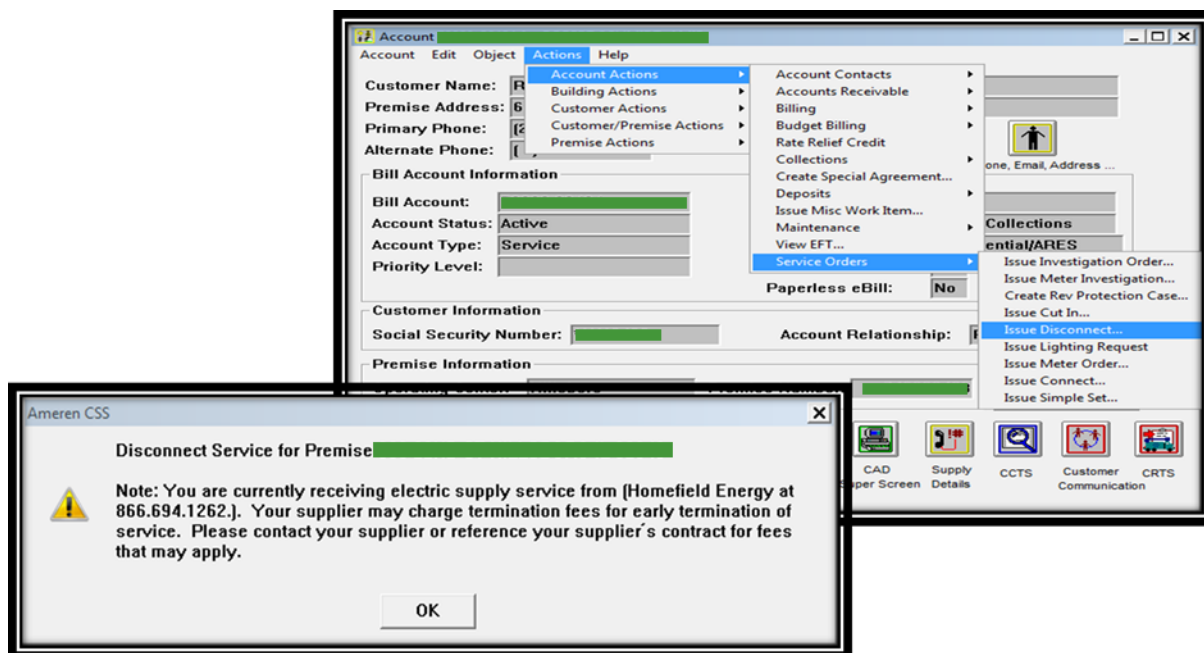
As outlined in its approved electric and gas deployment plans, the AMI team will continue to deploy meters, modules, and network equipment to meet the 2015 goals.

AMI Device	Cumulative Target at the End of 2015
AMI Electric Meters	188,419
AMI Gas Modules	98,375
AMI Network Devices	3,800

Implement Remote Connect/Disconnect Functionality

In June 2015, Ameren Illinois will implement remote connect/disconnect functionality using over-the-air commands for electric meters. These commands will provide more choice and flexibility for customer move-in and move-out, allowing Ameren Illinois to provide same day turn on/turn off service as well as allowing customers to schedule their connect or disconnect in our existing two-hour windows or in the "next available window" which will turn service on or off almost immediately. For move in/move out scenarios occurring on the same day for both electric and gas service (e.g., same day succession of service), we will be able to utilize the remote commands to get a read at the time of the account change, eliminating the need for a field visit to obtain a start or stop read. For the aforementioned functionality, customers will be able to request changes to their service via our call centers. Ameren is also offering customers a self-service option to request service connection or disconnection via the Ameren Illinois website.

Ameren Illinois will also be utilizing the remote connect/disconnect functionality for cut-out for non-pay situations. This will allow us to cut-out service for non-pay remotely. Additionally, where today it might take Ameren up to 36 hours to reconnect service upon payment, with the new functionality, we will be able to initiate a cut-in immediately; at any time of day once the customer has paid their bill or made a payment arrangement.



Examples of Remote Connect/Disconnect Functionality Screens in Ameren Illinois' Customer Service System

Deploy Revenue Protection Analytics

In 2015, Ameren will implement advanced analytics focused on revenue assurance, theft, meter health, and AMI deployment support for Ameren Illinois customers with AMR or AMI meters and modules using Oracle's DataRaker software-as-a-service analytics system.

The following functionality will be implemented in 2015:

1. **Revenue Assurance:** Ameren Illinois is implementing functionality for Gas Stuck Meter service orders in May 2015. Ameren Illinois will reduce manual efforts to address stuck meter orders by running the AMI and AMR CSS Stuck Meter service orders through DataRaker's advanced analytics to invalidate service orders and implementing auto-void functionality in CSS. We believe this will significantly reduce manual efforts for Gas Stuck Meter service orders. We expect to expand this functionality to include Electric Stuck Meter service orders in the second half of 2015.
2. **Theft:** Ameren Illinois will implement automated service orders based on an analytics test identifying Consumption on Inactive Meters for AMI and AMR meters in June 2015. Using DataRaker's analytics, we will be able to identify Consumption on Inactive Meters sooner than using our existing processes. We plan to automate the generation of field investigation service orders for the entire Ameren Illinois service territory. A second theft test is scheduled for the second half of 2015 that identifies active theft by searching for instances of outage followed by reduced consumption.
3. **Meter and Module Health:** Ameren Illinois will implement tests to support the AMI Deployment effort by monitoring meter health and identifying faulty equipment quickly upon installation. We believe that this will be especially beneficial for gas modules, allowing us to identify and categorize non-working gas meters or non-communicating/non-working gas modules.

Provide Non Billing Interval Data to Retail Electric Suppliers

Ameren Illinois intends to supply non billing customer specific hourly residential interval AMI data to Retail Electric Suppliers (RES) starting in the second quarter of 2015. Data will be sent via Electronic Data Interchange (EDI) transactions. The retail electric suppliers need customer authorization to access customer specific usage data. Retail Electric Suppliers and other third parties will also be able to access anonymous non billing and billing information. Anonymized data will meet the requirements of the 15/15 rule where the dataset can be no smaller than 15 customers and 1 customer cannot exceed 15% of the aggregate usage.

Develop Peak Time Rewards (PTR) program

In the fourth quarter of 2015, Ameren Illinois will implement functionality to allow residential customer enrollment in Ameren Illinois' Peak Time Rewards program. Additional functionality includes initiating and monitoring peak time reward events, calculating rebates for customers, and exception handling for event processing as well as bill changes or updates. Ameren Illinois has partnered with Elevate Energy to administer the Peak Time Rewards program. In accordance with the tariff, enrollment begins October 2015 and the first event could be called in June 2016.

Ameren Illinois has partnered with Aclara technologies to present Peak Time Reward information to customers via the web. The Aclara web portal will allow enrolled customers to see PTR event results when AMI data becomes available the next day after an event has occurred. Customers will also be able to see the PTR results and rebate amounts using the Bill Highlights panels within the Bill Analysis tool and Usage Tab.

Following are the PTR updates customers will receive in the web portal:

- **Manage My Energy Tab** - Customers are notified via the Bill Highlights Panel if a Peak Time Event occurred during their most recent billing period. The customer will see an estimated bill impact amount; for example, "Savings from Peak Time Rewards increased this month."
- **Bill Analysis Tool** - Customers are notified via Bill Highlights in Bill Analysis if a Peak Time Event occurred during their most recent billing period. The Aclara web portal will display baseline usage, actual usage and rebate amount.
- **Usage Tab** - Enrolled customers will be able to view peak event usage on the Usage Tab charts, which includes next day viewing of hourly usage intervals.

Integrate AMI with Outage Processes

In Q4 2015, Ameren Illinois will implement advanced outage functionality utilizing the data sent from the AMI electric meters to help us better identify and respond to outages. We will also be able to receive outage resolution confirmation messages, helping our Emergency Operations team to better pinpoint and dispatch service based on areas of need. Our outage functionality is designed as follows: upon losing service for over 30 seconds, the AMI electric meters will send a "last gasp" message indicating that the meter has lost power. Upon receipt of the last gasp message, our system does a series of filtering based on the messages it receives. For example, the system will determine whether it has received multiple last gasp messages on a transformer. This helps us to determine if there is a "one-off" outage or if multiple meters on a transformer are impacted -- helping us minimize false alarms caused by electricians or problems with a customer's service. The outage messages will be fed into our Advanced Distribution Management System (ADMS) to be used by our restoration teams.

Cybersecurity Plans and Testing

The Cybersecurity Team will continue to conduct vulnerability scanning and reviews in cooperation with the AMI Technical Team. The reviews and routine processes are designed to continue to build on existing success and security of the AMI environment. Each time the application systems are modified or updated, AMI Cybersecurity conducts an exhaustive scan and review of the systems using a widely accepted vulnerability scanner. Each item on the report is evaluated with the AMI Technical Team. Vulnerabilities and related findings are entered on a remediation review checklist and will be corrected to maintain a high level of readiness.

Process and Bill Commercial and Industrial Customers

As part of Stage 1, Ameren Illinois developed the software code to integrate the polyphase electric meter for Commercial and Industrial customers into our Energy Delivery Suite of Applications based on documentation of requirements from the AMI solution vendor, Landis+Gyr. Due to a hardware change in the polyphase meter, Landis+Gyr were unable to provide polyphase meters for testing to meet the Stage 1 schedule in the fourth quarter of 2014. Ameren Illinois has now received those meters and will be testing them in the second quarter of 2015. Once the polyphase meters have been vetted by Ameren Illinois' Meter Engineering group, Ameren Illinois will begin the polyphase deployment.

Deploy Residential Alert Functionality Through the Web Portal

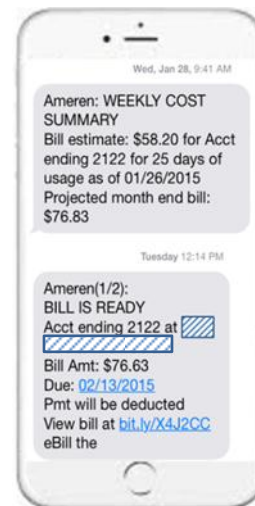
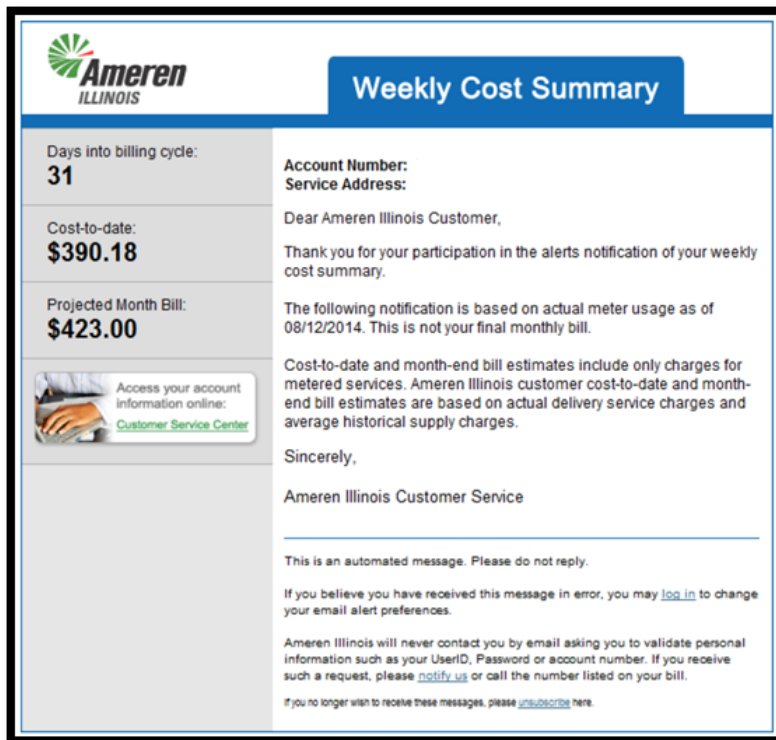
Alert functionality provides notifications to Ameren Illinois' systems and customers after an event(s) has occurred. Customers have access to weekly cost summary, usage threshold and cost thresholds alerts. Alerts are available to AMR and AMI residential customers via text or email.

The **weekly cost summary alert** provides customers with cost estimate data including the number of days into their billing cycle at the time of the alert, their estimated cost-to-date (includes AMR services), and their projected monthly bill based on current usage.

The **usage threshold alert** is triggered when the customer's usage-to-date exceeds the usage threshold set for a specific service. Usage thresholds are set separately for electric service and gas service. Alerts are also sent separately for electric service and gas service. If a customer has exceeded both thresholds set for their electric and gas services, they will receive two separate alerts.

The **cost threshold alert** is generated when the customer's estimated cost-to-date exceeds the cost threshold set for the combined services on the customer's account.

The alerts are available to AMI/AMR residential customers, customers. Customer sign-up is available via the Ameren Illinois customer portal or by phone to the Ameren Illinois contact center.



Examples of Customer Email and Text Alerts

Enhance and Distribute Customer, Employee, and Stakeholder AMI Communications

AMI Communications – Continued Customer Education

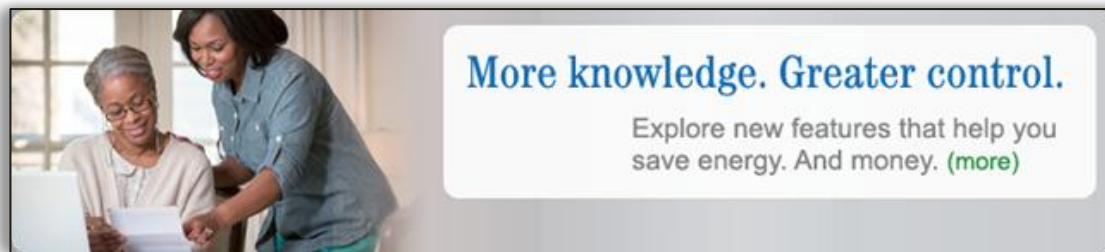
Direct Customer Communications

Ameren Illinois will continue to use direct customer communication vehicles like direct mail and email to help educate customers on the benefits that are available to them as meters are upgraded and routes are turned over to wireless billing.

Stakeholder Outreach

Ameren Illinois will continue to utilize the outreach plan outlined in 2013 and implemented in 2014 throughout the deployment efforts of 2015 using a tiered approach consisting of municipal, legislative, customers, and community education via direct mail, event participation, and collaborative support of groups like ISEIF.

Promote New Online Account Web Features and Alerts



In 2015, the AMI Communications Team will continue to provide customer education on better ways to manage and control energy costs. The new online account web features, usage data, and cost alerts are resources to help customers become more aware of their energy usage.

Customer Education

Ameren Illinois will use the following communication vehicles to help educate customers on the *new tabs*: *Manage My Energy, Bill History, and Usage*. Additionally, there are three new usage and cost alerts: Weekly Cost Summary, Usage Threshold, and Cost Threshold. To begin supporting the promotion of these new features and tools, the AMI Communications Team has and will develop the following:

Videos:

- **Navigational video** - this video will be available on the Ameren Illinois website and walks customers through the benefits of each new tab.
- **Energy Savings Plan/Green Button video** - this video will highlight the benefits of completing the home energy profile to help customers receive more personalized energy savings tips as well as the value of the Department of Energy program, Green Button. Short vignettes will be developed to further educate customers on the value of creating an Energy Savings Plan.
- **Alerts video** - this video will educate customers on the value of staying informed of their energy usage and costs with email and text alerts.

Brochures:

- **Web Features** - shares the benefits of the new online account web features under the Account Details page: Manage My Energy, Bill History and Usage tabs
- **Alerts** - shares the advantages of eligible customers signing up for the cost and usage alerts. These alerts are only for AMR and AMI residential customers.

Peak Time Rewards Customer Education

The Ameren Illinois Communications Team will continue to work with Elevate Energy as the program administrator in educating and enrolling eligible AMI customers. The team will leverage existing communications vehicles as well as support the development of new customer functionality on the existing website for Peak Time Rewards.

Positioning for the Future: Dynamic Pricing & Interfacing with Consumer Devices

With the de-regulated structure of the electric energy supply markets in Illinois, Ameren Illinois continues to believe the market, not the utility, is the appropriate mechanism for further development of alternative dynamic/time variant pricing, including time of use pricing. It is premature for Ameren Illinois to introduce additional dynamic/time variant tariffs. The majority of AIC's customers are now served from alternate Retail Electric Suppliers (RES). Ameren Illinois believes the markets should be given a chance to develop dynamic pricing products. AIC's AMI infrastructure and processes are expected to be in place to support Peak Time Rewards in late 2015. Ameren Illinois will continue to support its existing Real Time Pricing (RTP) and Power Smart Pricing (PSP) options, and will develop the required Peak Time Rewards program. Ameren Illinois offers a Bill Ready product which affords the RESs the ability to provide dynamic/time variant pricing rates and incorporate the associated charges on Ameren Illinois customer bills. Ameren Illinois does not intend to develop nor pursue any additional time of use or other dynamic/time variant pricing tariffs at this time.

In 2015, Ameren Illinois will begin verification of consumer devices at its Technology Applications Center (TAC). TAC personnel have begun soliciting consumer device manufacturers to provide their products for verification, including outreach to manufacturers at the Distributech conference in February ("the largest US event that covers the utility industry from end to end with 10,000 attendees, and more than 480 exhibitors"). TAC

personnel plan to begin testing the provided devices in the second quarter of 2015. AIC also plans to have a consumer device registration process in place and will provide a list of verified consumer devices on the Ameren Illinois website by the end of the first quarter 2016.

Ameren Illinois will continue to monitor HAN and other consumer device technology as it continues to mature and to improve, and consider the most appropriate approaches for enhancing its customers' interface choices. Ameren Illinois will also monitor and consider third party vendors to administer customer interface programs and support just as it has done with its Power Smart Pricing program and plans to do with Peak Time Rewards.

2015 Forecasted Electric Capital Expenditures

2015 Forecasted Expenditures	Capital
AMI Meters	\$27.1M
AMI Communications Network	\$4.8M
Hardware	\$0.3M
Software	\$0.9M
Systems Integration	\$12.3M
*Program Management	\$0.0M
Integrated Operations Center	\$0.2M
Deployment	\$0.3M
TOTAL	\$45.9M

*Costs have been reallocated to the AMI software, hardware, and device assets per guidance from Ameren Plant Accounting

EIMA Metrics

As outlined in the MAP-M metric plan, following are the results for the 2014 year-end AMI related EIMA metrics:

1. Estimated bills: 507,069
2. Consumption on inactive meters: 10,214,059 kwh
3. Uncollectibles: \$9,729,979

Ameren Illinois satisfied the 2014 performance year goals for all three metrics. These metrics will be explained in more detail in Ameren Illinois' Modernization Action Plan Multi-Year Performance Metrics 2015 Annual Report to be filed pursuant to 220 ILCS 5/16-108.5(f).

AMI Tracking Mechanisms

In its approved AMI Plan, Ameren Illinois proposed to track the following information. All information is as of December 31, 2014.

1. Percent of support system installed
100% of the AMI support systems and applications were installed
2. Percent of 2-way network installed
13.5% of the two way network was installed

3. Number and percent of AMI meters installed

46,972 meters installed, 6% of planned meter installations

4. Number of customers able to access the Web Portal and Web Portal usage statistics

1.167M residential customers are able to access the web portal

560 AMI, AMR, and Legacy customers accessed the web portal in 2014

5. Number of customers eligible for peak time rebate tariff

Peak Time Rebate functionality will be added in the 4th quarter of 2015

6. Number of customers signed up for peak time rebate tariff

Peak Time Rebate functionality will be added in the 4th quarter of 2015

7. Number of customers on PSP, RTP, or other real time rates

Number of customers on Ameren Illinois' Power Smart Pricing (PSP) Program = 12,008

Number of customers on an Ameren Illinois' Real Time Pricing (RTP) Program = 1,905

In addition to the above tracking mechanisms, Ameren Illinois has voluntarily agreed to track additional items. As stated, the work and activities described below are a voluntary undertaking on the part of Ameren Illinois. Recognizing changing circumstances that may affect the propriety of tracking the subject information, or where provisions of the enabling statutes are no longer operative, Ameren Illinois reserves the right to modify, delete, or add to any of the provisions described below, and the right to terminate any or all of the undertakings.

All data is as of December 31, 2014 unless otherwise stated.

1. The number of residential and small commercial customers taking service from Ameren Illinois sponsored time variant or dynamic pricing tariffs, segmented by residential and small commercial customers, and by the specific dynamic or time variant rate. A residential customer is defined as a customer taking service under DS1. A small commercial customer is defined as a DS2 customer with usage of 15,000 kWh or less annually for the prior calendar year.

Type of Tariff	# of Accounts
Residential – Power Smart Pricing	12,008
Residential – Ameren Illinois RTP1	75
Small Commercial - RTP	323
Total Residential and Small Commercial RTP Accts	12,406
Other Non-residential RTP	1,507
Total Hourly Price Accts	13,913

2. The estimated peak demand reduction in MW resulting from customer participation in Ameren Illinois' Peak Time Rebate Program. Estimated peak demand reduction is defined as the average estimated load reduction during the previous calendar year's Peak Time Rebate curtailment events.

The estimated peak demand reduction in MW resulting from customer participation in Ameren Illinois' Peak Time Rebate Program is not expected to be available until the 2017 annual report, because Ameren Illinois' Peak Time Rebate Program is not expected to begin until 2016.

3. The following by customer class (DS1, DS2-Small Commercial, DS2-All Other, DS3, DS4):

a. Number of AMI meters installed: 46,972

Customer Class	Meters
DS1	42,619
DS2 – Small Commercial	4,315
DS3	1
DS5	4
No Active Customer	33
Total	46,972

b. Number of AMI meters communicating through the AMI network and network accessed data used for billing.

Customer Class	Meters
DS1	226
DS2 – Small Commercial	17
Total	243

c. Number of customers with AMI meters whose data is available on the applicable web-based portal.

226 AMI customers' hourly interval data was available on the web portal in 2014

d. Number of customers with AMI meters who have viewed their data on the applicable web-based portal a minimum of one time during the calendar year.

22 AMI customers accessed their hourly interval data on the web portal in 2014

4. The number of AMI metered customers with a consumer device registered to receive information from the AMI meter. Ameren Illinois will also provide a list, by device type, of the consumer devices that have been certified as capable of receiving information from its AMI meters.

Ameren Illinois is still developing the verification and registration processes for consumer devices. Verification of consumer devices will begin in 2015, with registration process implementation in early 2016.

5. As applicable, the number of AMI metered customers who download data through the Green Button Initiative format a minimum of one time during the calendar year.

1 AMI customer downloaded their Green Button data in 2014

6. The number of AMI meters that are replaced prior to the end of their manufacturer expected 20-year useful life. The high level cause of the meter replacement will also be tracked in one of four categories – 1. Communication related, 2. Metrology related, 3. Remote switch related, 4. External physical damage not caused by the meter. Ameren Illinois will also note those internal meter malfunctions (categories 1 – 3 above) that cause a non-momentary disruption of service to the customer.

Data for AMI meters is not expected to be available until the 2016 annual report, because Ameren Illinois' installation of AMI meters began in the second quarter of 2014

7. Ameren Illinois will add the most current Part 466.140 Distributed Generation Annual Report as an attachment to its annual AMI Plan Update.

See Appendix 1.

8. Ameren Illinois will segment from the most current Part 466.140 Distributed Generation Annual Report those customers taking service on the Net Metering Tariff and add this document as an attachment to its annual AMI Plan Update.

See Appendix 2.

9. The total known distributed generation capacity in KW connected to the Ameren Illinois distribution system based on the Part 466.140 Distributed Generation Report and divide that capacity value by the total Ameren Illinois system peak demand.

The total known distributed generation capacity in KW connected to the Ameren Illinois distribution system is 13,9474 KW, or 0.66% of Ameren Illinois' peak demand during 2014 of 2126.022 MW

10. The time required to connect distributed resources to the grid. The clock will start upon receipt of a complete application from the customer. An application is considered complete when all required documentation, information, application fees, etc. have been received and application can be forwarded to engineering. The clock will end when an appropriate Ameren Illinois electric meter is installed and / or appropriately programmed to accommodate the distributed resource.

See Appendix 3.

11. The number of formal ICC complaints, informal ICC complaints and other complaints related to AMI deployment, broken down by type of complaint and resolution.

From June 2014 through December 2014, there were 6 complaints administered through Apex (deployment subcontractor).

Complaint	Resolution
Meter installation concern – meter box left open	Meter secured/Installer work audited for 3-day period
Customer cut-off while driving by Apex worker	Spoke with customer and resolved complaint
Customer reported no notice of temporarily losing power before meter exchange	Confirmed Installer knocked when he left the door hanger
Customer reported no notice of temporarily losing power before meter exchange	Discussed with installer, reinforced proper procedures
Customer unclear on non-standard metering process	Ameren Illinois made numerous attempts to contact customer; no voicemail. Non-Standard Metering set up on 1/6/15.
Customer complaint regarding meter exchange appointments	Customer owned two premises, meters were exchanged and customer notified.

From June 2014 through December 2014, there were 2 complaints administered through the Ameren Illinois Contact Center.

Complaint	Resolution
Customer reported that meter exchange caused hot socket in meter box	Ameren Illinois arranged for repairs at no charge to customer
Customer inquired about reason for outage	Advised customer about the reason for the outage

There were no formal or informal ICC complaints filed as a result of the AMI deployment.

12. The reduction in gasoline consumption from the reduction in manual meter reading miles, and converted to a reduction in greenhouse gas emissions based on formulas provided by CUB / ELPC / EDF.

No reduction in gasoline consumption due to AMI meters occurred in 2014. The initial route cutover occurred in December 2014 and as a result no manual meter reading was reduced in 2014. The reduction for 2015 will be reported in the 2016 annual report.

13. The annual combined load factor for all its AMI metered customers, and its entire system annual load factor. Annual load factor is defined as total consumption in MWH divided by the hourly peak demand at the time of system peak in MW multiplied by 8760 hours per year.

Data for AMI metered customers is not expected to be available until the 2016 annual report, because Ameren Illinois' installation of AMI meters began in the 2nd quarter of 2014, and the initial route cutover occurred in December.

14. The number and percentage of 12 kV distribution circuits using data from AMI meters as part of a voltage / var control scheme.

There are no 12 kV distribution circuits using data from AMI meters as part of a voltage/var control scheme.

Ameren Illinois has not agreed to any additional tracking mechanisms at this time, but will continue to consider additional tracking mechanisms as appropriate in the future.

Appendix 1 – Part 466.140 Distributed Generation Annual Report

2015 Annual Report of Ameren Illinois Company d/b/a Ameren Illinois Pursuant to Part 466.140 of the 83 Illinois Administrative Code <=10 MVA Distributed Generation Annual Report Requests for Distributed Generation Interconnection								
	2012-2013 Data (as of 2-10-13)		2013-2014 Data (as of 2-10-14)		2014-2015 Data (as of 2-10-15)		Totals as of 2-10-15	
	Completed	Under Review	Completed	Under Review	Completed	Under Review	Requests Received*	
1) Requests Received	104	21	36	11	33	14	541	
Level 1	76	15	25	9	18	10	434	
Level 2	27	6	11	1	15	4	101	
Level 3	0	0	0	0	0	0	1	
Level 4	1	0	0	1	0	0	5	
	Requests Approved*						Requests Approved*	
	Customers	kW	Customers	kW	Customers	kW	Customers	kW
2) Requests Approved	94	8098.4	46	423.9	53	1086.3	453	13947.4
Level 1:	68	373.0	35	155.7	32	175.0	363	1846.9
Solar	59	310.2	28	135.0	30	161.7	274	1301.9
Wind	5	36.8	7	20.7	0	0.0	49	244.2
Both	4	26.0	0	0.0	2	13.4	40	300.8
Level 2:	25	2925.4	11	268.2	21	911.3	89	7300.5
Solar	19	914.9	11	268.2	19	857.2	65	2452.4
Wind	5	1972.3	0	0.0	0	0.0	17	4629.3
Both	1	38.2	0	0.0	2	54.1	7	218.8
Level 3:	0	0.0	0	0.0	0	0.0	0	0.0
Level 4:	1	4800.0	0	0.0	0	0.0	1	4800.0
	Requests Denied*						Requests Denied*	
	Customers	kW	Customers	kW	Customers	kW	Customers	kW
3) Requests Denied	0	0.0	0	0.0	0	0.0	0	0.0

Note:

Level 1 = Distributed generation facilities less than or equal to 10kVA

Level 2 = Lab certified interconnection equipment with nameplate capacity less than or equal to 2MVA.

Level 3 = Distributed generation facility does not export power. Nameplate capacity is less than or equal to 50kVA if connected to area network or less than or equal to 10 MVA if connected to a radial distribution feeder.

Level 4 = Nameplate capacity rating is less than or equal to 10 MVA and the distribution generating facility does not qualify for a Level 1, 2 or 3 review, or the distribution generating facility has been reviewed but not approved under a Level 1, 2 or 3 review.

* - Total column reflects totals from the inception - April 1, 2008 to current.

Appendix 2 – Part 466.140 Distributed Generation Annual Report – Net Metering Only

<p align="center"> 2015 Annual Report of Ameren Illinois Company d/b/a Ameren Illinois Pursuant to Part 466.140 of the 83 Illinois Administrative Code <=10 MVA Distributed Generation Annual Report Requests for Distributed Generation Interconnection (Net Metering Customers Only) </p>								
	2012-2013 Data (as of 2-10-13)		2013-2014 Data (as of 2-10-14)		2014-2015 Data (as of 2-10-15)		Totals as of 2-10-15	
	<u>Completed</u>	<u>Under Review</u>	<u>Completed</u>	<u>Under Review</u>	<u>Completed</u>	<u>Under Review</u>	<u>Requests Received*</u>	
1) Requests Received	97	21	25	10	31	14	198	
Level 1	73	15	20	9	18	10	145	
Level 2	24	6	5	1	13	4	53	
Level 3	0	0	0	0	0	0	0	
Level 4	0	0	0	0	0	0	0	
2) Requests Approved	<u>Customers</u>	<u>kW</u>	<u>Customers</u>	<u>kW</u>	<u>Customers</u>	<u>kW</u>	<u>Requests Approved*</u>	
							<u>Customers</u>	<u>kW</u>
Level 1:	66	366.8	30	146.1	31	170.0	127	682.9
Solar	58	309.0	25	130.2	30	161.7	113	600.9
Wind	5	36.8	5	15.9	0	0.0	10	52.7
Both	3	21.0	0	0.0	1	8.4	4	29.3
Level 2:	19	383.0	5	123.9	18	450.9	42	957.7
Solar	15	272.5	5	123.9	16	396.8	36	793.2
Wind	3	72.3	0	0.0	0	0.0	3	72.3
Both	1	38.2	0	0.0	2	54.1	3	92.3
Level 3:	0	0.0	0	0.0	0	0.0	0	0.0
Level 4:	0	0.0	0	0.0	0	0.0	0	0.0
3) Requests Denied	<u>Customers</u>	<u>kW</u>	<u>Customers</u>	<u>kW</u>	<u>Customers</u>	<u>kW</u>	<u>Requests Denied*</u>	
							<u>Customers</u>	<u>kW</u>
	0	0.0	0	0.0	0	0.0	0	0.0

Note:

Level 1 = Distributed generation facilities less than or equal to 10kVA

Level 2 = Lab certified interconnection equipment with nameplate capacity less than or equal to 2MVA.

Level 3 = Distributed generation facility does not export power. Nameplate capacity is less than or equal to 50kVA if connected to area network or less than or equal to 10 MVA if connected to a radial distribution feeder.

Level 4 = Nameplate capacity rating is less than or equal to 10 MVA and the distribution generating facility does not qualify for a Level 1, 2 or 3 review, or the distribution generating facility has been reviewed but not approved under a Level 1, 2 or 3 review.

* - Total column reflects totals from the inception - Feb 10, 2012 to current.

Appendix 3 – Time Required for Connection of Distributed Resources

2015
Annual Report of
Ameren Illinois Company d/b/a Ameren Illinois
Pursuant to Part 466.140
of the 83 Illinois Administrative Code
≤10 MVA Distributed Generation Annual Report
Requests for Distributed Generation Interconnection (Net Metering Customers Only)***

<u>Customer #</u>	<u>Duration: Time from a Completed Application Until Energy Flows from Project to Grid (Live Date) in Actual Days</u>
1	344
2	47
3	77
4	39
5	161
6	59
7	20
8	48
9	37
10	26
11	7
12	174
13	58
14	99
15	2
16	161
17	118
18	50
19	49
20	45
21	14
22	16
23	6
24	17
25	10
26	10
27	113
28	41
29	9
30	6
31	4
32	766
33	435
34	14
35	246
36	7
37	135
38	1
39	45
40	93
41	55
42	1
43	21
44	119
45	24
46	4
47	86
48	24
49	86

Assumptions:

1. The clock will start upon receipt of a complete application from customer. An application is considered complete when all required documentation, information, application fees, etc. has been received and application can be forwarded to engineering. (instructions - use Column Q in spreadsheet)
2. The clock will end based on the date when the bi-directional (dual channel) meter is installed or re-programmed. The customer is not authorized to operate the system until the application has been reviewed and approved by Engineering, an inspection and site-test completed and a bi-directional (dual channel) meter installed. (Instructions - use column AC in spreadsheet)
3. Ameren Illinois Policy is to install a bi-directional (dual channel) meter for every distributed generation installation.
4. It should be noted some systems will NOT have energy flow into the grid. These systems were designed for load sharing to reduce billable energy consumption (e.g. some smaller systems were installed in school science labs for educational purposes only.)
5. Time is represented in actual days, not business days.

*** - This represents the total # of net metering customers that completed their installations from Feb 10, 2014 to Feb 10, 2015.

Appendix 4 – Non-Standard Metering Biannual Report

Each year beginning in 2015, on or before April 1 and on or before October 1, Ameren Illinois shall file with the ICC a semi-annual report that summarizes information pertaining to Customers that have refused AMI metering. The semi-annual report shall provide (1) the number of Customers that have refused AMI metering and the reason for the refusal; (2) a description of the Company's efforts to address such Customers; and (3) identification of the Company's costs associated with providing service to such Customers. The report due by April 1 shall be included in the Advanced Metering Infrastructure (AMI) annual report filed by the Company that requires the Company to file a report by April 1 of each year "regarding the progress it has made toward completing implementation of its AMI Plan", pursuant to Section 16-108.6(e) of the Public Utilities Act.

Within 30 days after the Company files the fourth semi-annual report described above, the Company shall file a petition with the ICC requesting authority to continue the use of this Rider and applicable charges. The petition will include the information provided in the previously submitted semi-annual reports.

Summary

For the period of June 2014 through December 2014, 27 AMR and AMI customers requested non-standard metering. Due to the prior AMR medical exemption process, 6 customers have been grandfathered into non-standard metering. These customers are not included in the 27 and do not receive the monthly advanced meter refusal charge. There were no Ameren Illinois customers enrolled in non-standard metering as a result of Unable-to-Complete AMI meter deployments.

Ameren Illinois Non-Standard Metering Refusals

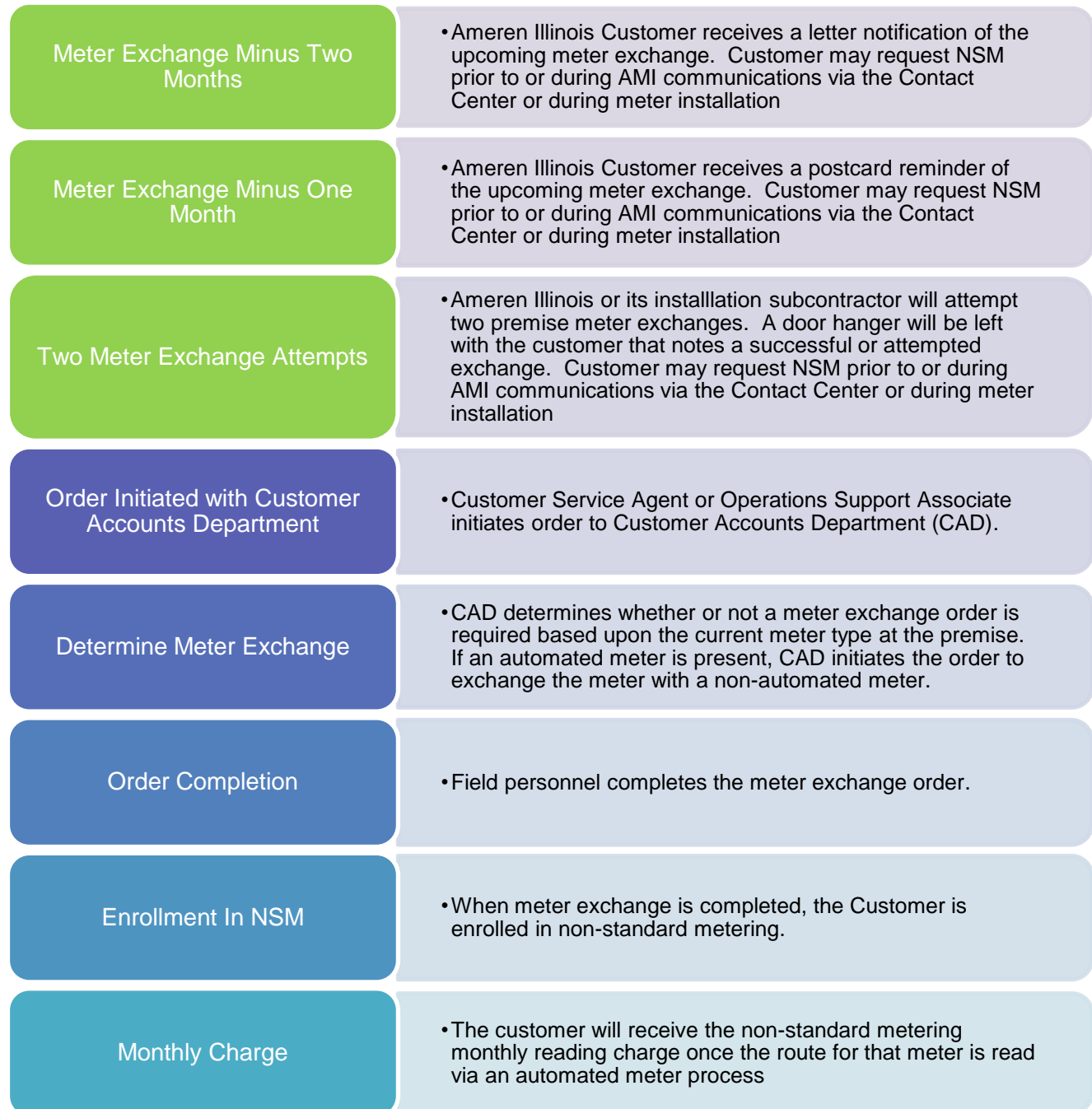
Refusal Reason	Number of Customers
Health	5
Privacy	0
Safety	3
No reason provided	19
Unable to Complete Advanced Meter Install	0
Total	27

There are two ways for customers to enroll in Non-Standard Metering:

1. Customer Request for Non-Standard Metering

Residential Customers have the option of refusing the installation of Advanced Metering or requesting the removal of previously installed Advanced Metering by contacting the Ameren Illinois Contact Center.

The enrollment process is as follows:



2. Customer is enrolled due to Unable-To-Complete Meter installations

As stated in the Non-Standard Metering Rider, if Ameren Illinois is unable to complete an Advanced Metering installation at eligible premises for reasons including but not limited to, locked gates or doors, physical blockages of meters, or unrestrained dogs, Ameren Illinois will treat these situations as Advanced Metering refusal. Ameren Illinois will contact the customer 6 times prior to enrolling them in non-standard metering.

The contact process is as follows:

Meter Exchange Minus Two Months	<ul style="list-style-type: none">Ameren Illinois Customer receives a letter notification of the upcoming meter exchange. Customer may request NSM prior to or during AMI communications via the Contact Center or during meter installation
Meter Exchange Minus One Month	<ul style="list-style-type: none">Ameren Illinois Customer receives a postcard reminder of the upcoming meter exchange. Customer may request NSM prior to or during AMI communications via the Contact Center or during meter installation
Two Meter Exchange Attempts	<ul style="list-style-type: none">Ameren Illinois or its installation subcontractor (Apex) will attempt two onsite premise meter exchanges. A door hanger will be left with the Customer that notes a successful exchange or an attempted exchange. Customer may request NSM prior to or during AMI communications via the Contact Center or during meter installation
Scheduled Meter Exchange Attempt	<ul style="list-style-type: none">Ameren Illinois or its installation subcontractor (Apex) will call the Customer to set up an appointment to exchange the meter. If an appointment cannot be scheduled, an order will be issued to local field office.
Enrollment In NSM	<ul style="list-style-type: none">The local field office will issue a letter that directs the Customer to schedule an exchange appointment within 30 days. If a customer does not schedule an appointment, the Customer will be enrolled in NSM when the local field office has availability (not less than 30 days from Customer notification letter.)
Unable-To-Complete Letter	<ul style="list-style-type: none">Customer Accounts Department sends Unable-To-Complete confirmation letter to customer

Ameren Illinois Customers with 2014 NSM Charges

There were four Ameren Illinois customers who received monthly charges as a result of Non-Standard Metering in 2014. Ameren Illinois performed one route cutover for AMI billing in December 2014. The NSM rider includes all automated metering, both AMI and AMR customers.

Meter Type	Service(s)	Number of Customers
AMR	Electric & Gas	2
AMR	Electric	1
AMI	Electric	1
Total		4

Customer Refusal Method

Department	Cost
Enrolled after Meter Installation	3
AMI Refusal During Deployment	7
Customer Contact Center (Prior to Meter Installation)	17
Total	27

Ameren Illinois' Costs Summary

Department	Cost
Meter Reading	\$224
Field and Meter Services	\$210
Deployment	\$160
AMI Operations	\$136
Customer Experience	\$247
Billing	\$368
Total	\$1,345

Ameren Illinois' Estimated Costs Descriptions

Meter Reading: Ameren Illinois incurred an estimated \$224 of meter reading costs for four customers who received NSM charges in 2014.

Manual Meter Reading costs:

Account	Service(s)	#Reads	Calculation
Customer 1 (AMR)	Electric & Gas	4	#Reads * monthly fee (\$24) = 96
Customer 2 (AMR)	Electric & Gas	2	#Reads * monthly fee (\$24) = 48
Customer 3 (AMR)	Electric	3	#Reads * monthly fee (\$20) = 60
Customer 4 (AMI)	Electric	1	#Reads * monthly fee (\$20) = 20
Total			\$224

Field and Meter Services: Ameren Illinois incurred an estimated \$210 of Field and Meter Services cost for customers' meter exchanges.

Meter Exchange order costs:

#Customers	Calculation
3	#Customers * Exchange Fee 3 * \$70 = \$210
Total	\$210

Deployment: Ameren Illinois incurred an estimated \$160 of Deployment costs for seven customers who refused AMI during deployment:

Subcontractor Installer Costs:

#Subcontractor Rate	Calculation
\$22.90	Rate * #Customers \$22.90 * 7 = \$160
Total	\$160

AMI Operations: Ameren Illinois incurred an estimated \$136 of Operations costs for ten customers who requested NSM during meter installation or after meter installation (exchange):

Operations Support Costs:

OSR Rate	Time to Support	Cost to Support	Calculation
\$81.86	10 minutes/Customer	\$13.64/Customer	Cost to Support * #Customers \$13.64 * 10 = \$136
Total			\$136

Customer Experience:

- Ameren Illinois incurred an estimated \$232 of costs for 17 customers who contacted the Ameren Illinois Customer Contact Center to request NSM.
- Ameren Illinois incurred postage and labor costs of \$15 for all 27 customers who requested NSM.

Rate		Cost to Support	Calculation
Contact Center \$81.86/hr	10 Minutes/Customer	\$13.64/Customer	Cost to Support * #Customers $\$13.64 * 17 = \232
Postage \$0.55/letter	1 Letter/Customer	\$0.55/Customer	Cost to Support * #Letters $\$0.55/\text{letter} * 27 = \15
Total			\$247

Billing: Ameren Illinois incurred an estimated \$368 of cost for all 27 customers who requested Non-Standard metering in 2014.

Customer Accounts department (CAD) Costs:

CAD Rate	Time to Support	Cost to Support	Calculation
\$81.86	10 minutes/Customer	\$13.64/Customer	Cost to Support * #Customers $\$13.64 * 27 = \368
Total			\$368